

ABSTRACT OF THE DISCLOSURE

A zoom lens includes, in order from the enlarging side: a first lens group that has negative refractive power, is movable for focusing, and is stationary during zooming; second, third, and fourth lens groups that are movable for zooming; and a fifth lens group that is stationary during  
5 zooming. The second and fifth lens groups have positive refractive power and the third and fourth lens groups have negative refractive power. The second and third lens groups move nearer the enlarging side when the zoom lens zooms toward the telephoto end and the fourth lens group is positioned nearer the reducing side when at the telephoto end than when at the wide-angle end. The ratios of the focal lengths of the first, second, fourth, and fifth lens groups to the focal length  
10 of the zoom lens satisfy four conditions. A projection display device uses the zoom lens.